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Predicting Adolescent Dating Violence Perpetration:

Role of Exposure to Intimate Partner Violence and Parenting Practices

Natasha E. Latzman, PhD, **Alana M. Vivolo-Kantor, MPH**, **Phyllis Holditch Niolon, PhD**, and **Sharon R. Ghazarian, PhD**

Division of Violence Prevention, National Center for Injury Prevention and Control, CDC, Atlanta, Georgia

Abstract

Introduction—Exposure to adult intimate partner violence (IPV) places youth at risk for a range of outcomes, including perpetration of adolescent dating violence (ADV). However, there is variability in the effect of IPV exposure, as many youth who are exposed to IPV do not go on to exhibit problems. Thus, research is needed to examine contextual factors, such as parenting practices, to more fully explain heterogeneity in outcomes and better predict ADV perpetration. The current research draws from a multisite study to investigate the predictive power of IPV exposure and parenting practices on subsequent ADV perpetration.

Methods—Participants included 417 adolescents (48.7% female) drawn from middle schools in high-risk, urban communities. IPV exposure, two types of parenting practices (positive parenting/involvement and parental knowledge of their child's dating), and five types of ADV perpetration (threatening behaviors, verbal/emotional abuse, relational abuse, physical abuse, and sexual abuse) were assessed at baseline (2012) and approximately 5 months later (2013) via adolescent report. Analyses (conducted in 2015) used a structural equation modeling approach.

Results—Structural models indicated that IPV exposure was positively related only to relational abuse at follow-up. Further, adolescents who reported parents having less knowledge of dating partners were more likely to report perpetrating two types of ADV (physical and verbal/emotional abuse) at follow-up. Analyses did not demonstrate any significant interaction effects.

Conclusions—Results fill a critical gap in understanding of important targets to prevent ADV in middle school and highlight the important role that parents may play in ADV prevention

Introduction

Youth exposed to adult intimate partner violence (IPV) are at risk for severe and potentially lifelong difficulties with physical, mental, and behavioral health, including perpetration of adolescent dating violence (ADV).[1–5] However, there also appears to be considerable variability in the effect of IPV exposure, as many youth who are exposed to IPV do not go on to exhibit problems, including violent behavior toward a dating partner.[6] Thus, research

Address correspondence to: Natasha E. Latzman, PhD, National Center for Injury Prevention and Control, CDC, 4770 Buford Highway NE, MS-F64, Atlanta GA 30341. nlatzman@cdc.gov.

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on the developmental consequences of exposure to IPV has shifted from identifying negative outcomes toward an examination of the context in which the development of these outcomes takes place.[7] Consistent with this changing focus, the current research draws from a multisite study to investigate the predictive power of IPV exposure and parenting practices on subsequent ADV perpetration.

A serious and pervasive public health problem,[8] ADV is defined as any physically, sexually, or psychologically violent behavior, including stalking, directed toward a current or former dating partner in adolescence.[9] One of the most commonly examined historical risk factors for ADV perpetration is exposure to IPV.[4,6,10–14] Social learning theory[15] suggests that youth observe IPV and later model these learned aggressive behaviors in their dating relationships.[16,17] Nonetheless, it is clear that not all youth who are exposed to IPV will go on to perpetrate ADV, nor do all youth who perpetrate ADV have a history of such violence exposure.[6] Thus, consistent with a social-ecological approach,[18,19] it appears that although exposure to IPV is a risk factor for ADV perpetration, specific contextual characteristics likely render some youth more or less susceptible to its effects.

In addition to exposure to IPV, substantial clinical, theoretical, and empirical literatures have linked specific parenting practices with aggressive behaviors in childhood and adolescence.[20,21] Social learning[15] and social interactional theories[22] suggest that negative exchanges within the parent–child relationship leads to the teaching and socialization of aggressive behaviors. Indeed, research indicates that poor parenting practices, such as low parental monitoring/supervision, are associated with ADV perpetration in both cross-sectional[23–26] and longitudinal[10,27,28] work. Conversely, positive parenting practices facilitate prosocial development,[22] and cross-sectional work has revealed a negative association between appropriate monitoring/supervision and responsiveness and ADV involvement.[29] Nonetheless, extant research suggests that interactions between parents and adolescents surrounding dating are novel and may not be fully captured by indicators of positive parenting.[30] To the authors' knowledge, only one study has examined parenting specific to dating and ADV. Giordano and colleagues[31] found a positive relationship between parental negativity about their child's dating and later reports of dating violence in young adulthood. This work is extended here by examining another dating-specific construct: parental knowledge of their child's dating.

Numerous studies have also highlighted the important role of parenting practices in exacerbating or buffering the impact of violence exposure on a range of negative outcomes, including substance use,[32] externalizing behaviors,[33–35] internalizing problems,[36,37] and teenage pregnancy.[35] Indeed, positive parenting and a secure attachment to a nonviolent parent has been called youths' "greatest protective resource" against violence exposure and other forms of stress.[38] However, to the authors' knowledge, only one study has examined the moderating role of parenting practices in the relationship between IPV exposure and ADV perpetration. In a small sample of maltreated youth, Garrido and Taussig[39] found a positive association between IPV exposure and a composite measure of physical and/or psychological ADV perpetration when parents employed lower (but not higher) levels of positive parenting practices. However, these analyses were cross-sectional and focused solely on positive parenting and physical/psychological ADV.

The primary aim of the present study is to explore the relationships among IPV exposure, parenting practices, and multiple ADV perpetration types in adolescents drawn from schools in high-risk urban communities. Prior work has been extended by examining a broad range of ADV perpetration types (e.g., threatening behaviors, verbal/emotional abuse, relational abuse, physical abuse, and sexual abuse) and two types of parenting practices: a general dimension of positive parenting/involvement and a more specific dimension tapping parental knowledge of their child's dating partners. Consistent with previous research, a positive association was expected between IPV exposure and subsequent ADV perpetration, and a negative association between both types of parenting practices and ADV perpetration, even after controlling for baseline lifetime reports of ADV perpetration. Building on existing literature supporting the key role of parenting practices in moderating violence exposure and a range of youth outcomes,[39] the secondary aim was to examine whether associations between IPV exposure and ADV perpetration were moderated by parenting practices. It was hypothesized that at higher levels of both parenting practices, the relation between IPV exposure and subsequent ADV perpetration would be attenuated.

Methods

Participants

The present study used data collected from adolescents drawn from 19 middle schools in four high-risk (e.g., above-average rates of crime and economic disadvantage) urban communities participating in the *Dating Matters®: Strategies to Promote Healthy Teen Relationships* (*Dating Matters*®) evaluation.[40,41] The current study used entirely pre-intervention survey data collected from sixth and seventh grade students at control (standard of care) schools, where only an eighth grade intervention was implemented. Data were collected during the fall 2012 semester (baseline) and again in the spring 2013 semester (follow-up, approximately 5 months later). All procedures and materials for the study were approved by multiple IRBs and described in detail in Niolon et al.[42]

Sample demographics—Participants include 698 adolescents in sixth and seventh grade completing both baseline and follow-up assessments. Participants who never dated (n=265) or did not complete the question on dating history (n=18) were excluded. The 417 adolescents who dated were 48.7% female (n=203), 45.1% non-Hispanic black (n=173), 39.3% Hispanic (n=164), 4.8% non-Hispanic white (n=20), and 4.1% (n=17) identified as other race. Approximately 44% of the sample was in sixth grade (n=182), 56% were in seventh grade (n=235; owing to missing data, race and grade do not add up to 417 participants or 100%), and enrollment was spread across schools in Alameda County, CA (n=154), Baltimore, MD (n=43), Broward County, FL (n=119), and Chicago, IL (n=101). The schools from which the adolescents were drawn demonstrated high levels of economic disadvantage (e.g., school-level rate of free/reduced-cost lunch ranged from 52% to 99%).

Measures

Demographic covariates captured at baseline included sex, grade (as proxy for age), race, and site. At baseline, exposure to IPV was assessed with two items drawn from the Juvenile Victimization Questionnaire[43]: *At any time in your life, did you SEE [HEAR] a parent get*

pushed, slapped, hit, punched, or beat up by another parent, or their boyfriend or girlfriend? The two items were aggregated and dichotomized to create one manifest variable, never exposed versus exposed.

At baseline, adolescents reported on parenting behaviors using items drawn from the Alabama Parenting Questionnaire (APQ),[44] which is designed to assess parenting practices related to youth disruptive behavior problems,[45] and project-developed items intended to tap parental knowledge of their child's dating. Adolescents indicated (1 *never* to 5=*always*) how often an event typically occurs in their home. For the current study, five items from the APQ involvement and positive parenting scales (e.g., *Your parent tells you that you are doing a good job*) were included as indicators of a latent variable for positive parenting/involvement (α=0.81) and two items (*You have a boy/girlfriend and your parent doesn't know it* and *Your parent does not know the people you date*) assessing parental knowledge of their child's dating were averaged to create a manifest variable, "dating knowledge" (r=0.43). Items for the dating knowledge scale were recoded such that higher scores indicate more knowledge.

At both baseline and follow-up, ADV perpetration was measured using the Conflict in Adolescent Dating Relationships Inventory,[46] slightly revised to include gender-neutral language. Five subscales were used in the present study: threatening behaviors, verbal/emotional abuse, relational abuse, physical abuse, and sexual abuse. Latent variables were modeled for physical (four items; α=0.85) and verbal/emotional abuse (ten items; α=0.86) at follow-up, as measurement models indicated a good fit to the underlying data with these constructs as latent variables. Threatening behaviors and sexual and relational abuse were modeled as manifest variables (see Results section additional details on measurement model and fit) wherein items were dichotomized to indicate perpetration during the last 4 months, then summed to create an index score, ranging from 0 to 3 (relational abuse) or 0 to 4 (threating behaviors, sexual abuse). Baseline manifest variables (as index scores) were created for all ADV subscales and included as covariates in models.

Statistical Analysis

Descriptive statistics were examined using SPSS, version 21 and subsequent analyses used a structural equation modeling (SEM) approach in MPlus, version 7.3. SEM allows for specification of residual error variances inherent within the measurement of each observed variable. Specifying measurement error (via the measurement model) removes potential measurement bias from parameter estimates and purifies results—a method that is not possible within traditional regression techniques. SEM also allows examination of multiple regression paths within a single structural model without raising the pairwise comparison rate. Missing data (overall percentage ranged from 0% to 26.9%) were addressed using principle component analysis methods in the Quark package of R[47,48] to create a set of auxiliary variables for use with full information maximum likelihood (FIML) methods in MPlus. FIML does not impute the data but instead uses all available information within the model to inform parameters and SEs. FIML is considered a robust modern analytic approach to missing data that preserves power for longitudinal data.[49] Missing data were deemed missing at random and thus were appropriately handled with FIML. Consistent with SEM methodology, measurement and structural models were specified. Data were deemed a good

fit to the underlying data when the confirmatory fit index approximated 0.95 and the root mean square error of approximation was ≤0.05.[50,51] To test hypotheses regarding relationships among IPV exposure, parenting practices, and all five ADV perpetration types, structural models were used to determine significant parameter estimates among key study variables. Potential moderating effects of parenting practices were examined using latent (IPV X involvement) and manifest (IPV X dating knowledge) interaction terms predicting ADV perpetration subscales.

Owing to the nested nature of participants within schools, intra-class correlations were examined to determine if the independence assumption was violated. Intra-class correlations on all five ADV outcomes were below the generally accepted threshold of 10% (range, 0%–5.9%). Site was included as a covariate in all models as well as youth race, grade, gender, and baseline levels of ADV (all subscales as separate manifest variables). Analyses were conducted in 2015.

Results

Of the 417 participants, 32.6% reported having ever been exposed to IPV. Baseline lifetime rates for ADV perpetration ranged from 8.4% (sexual abuse) to 49.2% (verbal/emotional abuse) and past 4–month rates of perpetration, as reported at follow-up, ranged from 6.7% (relational abuse) to 41.2% (verbal/emotional abuse). The mean levels of positive parenting/involvement and dating knowledge were 3.78 (SD=0.98) and 2.45 (SD=1.35), respectively. Demographic and study covariates were associated with main constructs of interest in expected directions (A table depicting bivariate relationships among study variables is available by request to the corresponding author). There were no significant grade, site, or race differences with study variables of interest. However, there was one notable gender difference wherein girls were more likely to report lower parental knowledge of dating compared with boys ($\beta=-0.16$, $p < 0.01$).

Structural models with the full dating sample (Figure 1) demonstrated a significant association between IPV exposure and relational abuse ($\beta = .22$, $p < 0.05$), such that adolescents who reported IPV exposure at baseline were more likely to report perpetrating relational abuse at follow-up. Parental dating knowledge was associated with physical ($\beta=-0.19$, $p < 0.05$) and verbal/emotional abuse ($\beta=-0.22$, $p < 0.01$), wherein adolescents who reported their parents having less knowledge of their dating partners at baseline were more likely to report physical and verbal/emotional abuse perpetration at follow-up. Although not a main focus of the current study, stratified gender models were examined in post hoc analyses to provide insight into whether study results may vary by gender. Strong gender invariance was specified for the measurement model. In stratified models, higher levels of positive parenting/involvement at baseline were associated with lower levels of relational abuse ($\beta=-0.17$, $p < 0.05$) at follow-up for girls only and lower levels of physical abuse perpetration ($\beta=-0.15$, $p < 0.05$) at follow-up for boys only. Analyses did not demonstrate any significant interaction effects, suggesting that in the study sample, the relationship between IPV exposure and ADV perpetration was not moderated by parenting practices.

Discussion

The current investigation is the first prospective examination of the joint effects of IPV exposure and parenting practices on ADV perpetration. Results confirm the complexity of the relationship between IPV exposure and ADV perpetration, and indicate that parenting practices may represent an important protective factor impacting later ADV perpetration. Indeed, results are consistent with emerging work confirming the important role that safe, stable, nurturing relationships and environments between caregivers and children potentially can play in the interruption of the intergenerational cycle of family violence.[52] Confidence in this study's findings is bolstered by use of a comprehensive measure of ADV subtypes and robust analytic models that controlled for lifetime ADV perpetration.

In the present study, approximately 33% of adolescents reported ever having been exposed (seeing or hearing) to IPV. This rate of exposure is comparable to some studies involving high-risk samples,[53] but is almost double the rate typically found in national studies, such as the National Survey of Children's Exposure to Violence.[54] Further, structural models indicated that IPV exposure was related (positively) to only relational abuse at follow-up. These results are surprising given the emphasis, both theoretical and empirical, on IPV exposure as an important risk factor for aggression[3] and involvement in ADV.[5,55] Nonetheless, some recent work has failed to find a significant relationship between IPV exposure and ADV perpetration, particularly after considering other factors, such as other forms of maltreatment and friends' involvement in ADV.[39,56] In this study, consideration of multiple covariates and the possible heterogeneity with regard to the nature of IPV exposure (e.g., age of exposure, chronicity) may also be potential explanations for the null association between IPV exposure and several ADV perpetration subtypes.

The models in this study lend partial support for the hypotheses and indicate that adolescents who report parents having less knowledge of dating partners were more likely to report perpetrating two types of ADV (physical and verbal/emotional abuse) at follow-up. In other words, parental knowledge of dating plays an important role in the prediction of ADV perpetration, even after considering the potentially harmful effects of IPV exposure. These findings are consistent with those found in the peer literature, which support a negative association between greater parental knowledge about peers and general adolescent problem behaviors.[57] Future work that more fully explores the construct of parental knowledge (e.g., nature and extent of the knowledge) may help elucidate why significant relationships were found between parental knowledge and only some ADV subtypes and interaction effects were not found. For example, research suggests how parents come to be aware of their child's peers and day-to-day activities (e.g., adolescent self-disclosure, parental solicitation, via an informant such as a sibling) relates to different degrees of parental knowledge and, in in turn, predicts adolescent risk behaviors (e.g., substance use).[58]

The importance of considering both IPV exposure and parenting is consistent with a number of frameworks, including the cognitive–contextual framework[59] and the emotional security hypothesis.[60] These frameworks posit that the family environment may represent one important contextual factor helping to explain the different developmental outcomes following exposure to parental conflict. Parental conflict and violence may be perceived

differently by children who have a parent employing warm and effective parenting strategies versus hostile or poor strategies. The mechanism by which parenting serves to mitigate the impact of IPV exposure will be important for future work to examine. Specifically, investigations into parent–child communication about observed violence may reveal how youth understand the cause and impact of violence in intimate relationships.[61]

Although not a main focus of the current study, stratified gender models indicated that higher levels of positive parenting/involvement were associated with lower levels of relational abuse for girls only, and higher levels of positive parenting/involvement were associated with lower levels of physical abuse perpetration for boys only. These gender-stratified models were likely underpowered because of low sample size; nonetheless, the differential findings may indicate differential pathways of risk for ADV perpetration for boys and girls. A recent study drawing from baseline *Dating Matters*® data found unique gender-specific risk factors for ADV perpetration,[42] and additional waves of *Dating Matters*® data will allow for further longitudinal examination of gender differences in moderation models. Also of note, this study found that girls reported parents having less knowledge of their dating partners than did boys. Prior research on dating rules has shown that girls are subject to more restrictive parenting,[62] which may be perceived by the adolescent as aversive,[22] and in turn may lead to less disclosure of dating activity. This is also an area in which exploration of gender differences and links with ADV involvement is warranted.

Limitations

This study has several limitations of note. First, the findings may only be generalizable to youth living in high-risk urban areas. Nonetheless, this sample is a traditionally understudied population in the ADV literature,[40] and therefore the results are an important contribution to the field. Second, both IPV exposure and parenting practices were measured at baseline. Longitudinal data for the *Dating Matters*® initiative are currently being collected and can help elucidate the temporal connectedness of these two factors. Third, all of the constructs were measured via adolescent self-report and including data from other family members or observers could provide a broader perspective on the relationships among study variables. In addition, the measure of IPV exposure was limited to two items that assessed lifetime exposure and, similarly, this study focused on only two parenting practices. Future work should consider the impact of other parenting practices, such as discipline strategies, broader dimensions of the parent–child relationship such as warmth, and more-specific practices related to dating such as parental communication about expectations for appropriate dating and imposition of dating-specific rules.

Conclusions

Limitations notwithstanding, the current study informs ongoing federal initiatives that focus on violence-exposed youth (e.g., Defending Childhood Initiative[63]) and fills a gap in understanding populations who may benefit from more-targeted ADV prevention strategies in middle school. It is clear that youth in this age group are involved in ADV, making late childhood and early adolescence opportune times for prevention messaging and intervention. Several prevention programs aimed at reducing ADV (*Dating Matters*®[40] and Families for

Safe Dates[64]) and related health outcomes (e.g., sexual risk behaviors, *Parents Matter!*[65]) include caregivers as prevention messengers. The authors' work suggests that these family-based prevention programs should also consider teaching parents skills to improve awareness and knowledge of their child's dating partners. These results also support targeted approaches designed to prevent ADV with youth exposed to IPV, such as Mom and Teens for Safe Dates.[66]

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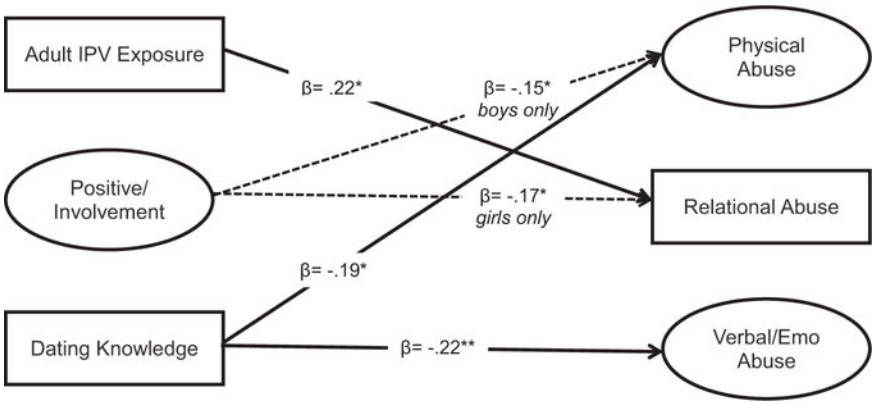

Figure 1.

Model predicting adolescent dating violence (ADV) from exposure to adult intimate partner violence (IPV) and parenting practices.

Note: Model also accounts for gender, grade, race, site, and baseline levels of ADV. Only significant structural paths shown. There were no significant associations with threatening behavior or sexual abuse subscales. Dotted lines indicate significant parameter estimates from stratified gender models in post hoc analyses.

Emo, emotional.